Alabama Department of Agriculture and Industries Policy Concerning the Disposal of Dead Farm Animals and the Disposal Offal from Custom Slaughter Facilities

Updated: October 1, 2010

Statement of Need and Purpose:

The death of farm animals is a normal and inevitable part of livestock production. Due to human health, nuisance and environmental concerns, it is necessary to provide this policy as guidance to producers who have questions as to the lawful disposal of deceased farm animals.

The slaughter of cattle, goats, deer etc. is performed by licensed commercial slaughter facilities across Alabama. These slaughter facilities follow the guidelines of the Meat Inspection program. The systematic disposal of the offal or non-edible by-products from these activities has historically been rendering. In addition to the existing USDA regulations that require the removal of specified risk materials (SRMS) in cattle 30 months of age and older processed for human food, recent changes in FDA federal regulations, specific to BSE concerns found in CFR 21 589.2001, requires the additional removal of certain cattle material prohibited in animal feed (CMPAF) and will make the rendering of specific portions of the by-products utilized for all animal feed unlawful. Rendering companies have responded in various ways; from refusal to accept offal entirely to the imposition of requirements for waste separation and liability insurance requirements. This policy lists options for these slaughter facilities.

Disposal of Dead Farm Animals

Carcasses of farm animals meet the definition of a "solid waste" in the regulations of the Alabama Department of Environment Management, Division of Solid Waste Management found at www.adem.state.al.us. It is recommended that producers dispose of carcasses within 24 hours of discovery of the dead animal, regardless of weather conditions. The State Veterinarian with the Alabama Department of Agriculture and Industries is responsible for approving methods or systems of dead animal carcass disposal. Adequate records should be kept that document all actions taken during the complete disposal process.

Therefore, owners of livestock have several options for dealing with dead farm animals. They are as follows:

On-Farm Burial: According to Section 3-1-28 of the Code of Alabama: Burial or burning of bodies of dead animals generally; burning of hogs dying from cholera, etc.; failure to burn or bury dead animal, etc.

All owners or custodians of animals which die or are killed in their possession or custody, other than such as are slaughtered for food, within 24 hours shall cause the bodies of such animals to be burned or buried at least two feet below the surface of the ground. Hogs dying from cholera or any other disease whatsoever shall be burned. No such animal shall be burned or buried sufficiently near a residence or residences as to create a nuisance. Any person violating this section, whether by failure to burn or bury an animal dying or being killed in his possession or by causing the same to be

burned in such proximity to a dwelling or in such other way as to become a nuisance shall be guilty of a misdemeanor and, on conviction, shall be fined not more than \$50.00.

Burial should conform to the recommendations of the US Department of Agriculture-Natural Resources Conservation Service found at:

http://efotg.sc.egov.usda.gov//references/public/AL/al316 EmergDisp R0309.pdf

When burying on farm, the disposal site should be evaluated for the following:

- soil type
- depth to bedrock
- presence of fractured or cavernous bedrock
- depth to seasonal high water table 1/
- flooding hazard
- proximity to waterbodies (rivers, streams, ponds, lakes, etc.)
- proximity to wells
- distance to public areas

If the potential exists for animals such as coyotes, dogs, possums, etc., to dig into the burial or composting site, either use more than the two feet of cover material recommended or use an appropriate fence to exclude these type animals.

Site Approval

Contact the local NRCS office for an on-site assessment to establish a suitable burial site. In the event of a catastrophic loss, notify the state veterinarian for approval to use the burial site prior to disposal.

Site Evaluation Criteria

Dead animal burial sites should be:

- at least 300 ft. up gradient or 150 ft. down gradient from any well
- at least 165 ft. from a property line or public use area
- at least 100 ft. from a water body, stream, or drainageway
- no closer than 2 ft. to bedrock or the seasonal high water table 1/

• in soils with a permeability of less than 2.0 in/hr (soils with greater permeability will be avoided or will have a liner installed)

Burial Procedure

Burial sites are to be excavated an appropriate depth for the specific soil and geologic conditions. The maximum size of the burial excavation should be 0.1 acre (about 4,400 sq. ft.). Multiple excavations may be needed.

Carcasses of large animals (hogs, cattle, etc.) should be placed in a layer one carcass thick and covered with a minimum of two feet of soil. For deep soils (where bedrock is not a concern), carcasses and soil can be placed in multiple layers up to a total depth of eight feet.

The burial site should be mounded with a covering of at least two feet of soil, and surface water should be diverted from the mound. The site should be vegetated immediately after completion to prevent erosion of the soil covering.

For pits that are 4 to 5 ft. deep, a step or bench 18 in. wide and 1 ft. deep will be dug around the perimeter of the main pit so the remaining vertical wall will not exceed 4 feet. For pits greater than five feet deep, the earthen wall shall be sloped at 1.5 horizontal to 1 vertical or flatter.

Landfill

Disposal at a landfill permitted by the Alabama Department of Environmental Management (ADEM) may be an option in some locations. Here is a link to a list of ADEM permitted landfills. http://www.adem.state.al.us/programs/land/landforms/MSWLFsMasterList9-19-07.pdf

Catastrophic Losses:

The State Veterinarian with the Alabama Department of Agriculture and Industries should be notified of catastrophic losses of livestock. If on-site burial is unsuitable, landfilling, composting, or rendering may be the only options viable in the event of catastrophic livestock losses.

Composting

An alternative to burial is composting in windrows, bins made with large hay bales, or static piles. Composting must be done under a roof or other suitable cover to prevent runoff contamination. Plastic sheeting (minimum 6 mil thick) may be used if secured properly to remain in place in high wind, no outside runoff will contact the plastic, and runoff leaving the site passes through a filter strip.

Suitable bulking materials include chicken litter, sawdust, peanut hulls, straw, small wood chips, etc. Maximizing carcass contact with the bulking material will improve composting efficiency. Water may need to be added during the carcass and bulking material layering process when using dry bulking material.

All composting processes should begin by placing 12 in. of bulking material on the ground. All carcass layers should be no more than one carcass thick. After the layering process is complete, cover the last layer with a minimum of one foot of bulking material.

Windrows

Windrow composting is best suited for small animal carcasses and may require specialized equipment to turn the compost for subsequent stages. The base for windrowing should be

approximately six feet wide. Place a layer of carcasses and cover with an equal thickness of bulking material. Add additional layers to a total depth of about three feet above ground.

Hay Bale Bins

Place the bales end-to-end to form walls for three-sided enclosures. Excessively large bins should be avoided. A layout of two to three bales deep and three bales wide is the suggested size. Each layer of carcasses should be covered with an equal depth of bulking material. Fill the bins with alternating layers of carcasses and bulking material.

Static Piles

Build the pile with alternating layers of carcasses and bulking material. Each layer of carcasses should be covered with an equal depth of bulking material.

Maintenance

Inspect the compost process daily for signs of cover damage, spillage, leaching, etc. Add bulking material for cover as the composting material settles.

The composting process will work best when the moisture content is 50% to 60% by weight (similar to a damp sponge with no free water present). Water may need to be added when compost is turned.

Daily temperature monitoring is recommended to ensure adequate temperatures of 130°-150°F have occurred. As the temperature reaches a peak between 130°-150°F and begins to decline, turn the compost for it to undergo a second composting stage. Any animal parts exposed in this process should be covered with additional bulking material. Allow two additional months before land applying this material. If raw animal parts are evident after the second composting stage, a third compost cycle will be required.

The compost should be land-applied at agronomic rates using appropriate guidelines and best management practices.

References

NRCS AL Conservation Practice Standard

Code 316 - Animal Mortality Facility

Code 317 - Composting Facility

Code 393 - Filter Strip

Code 590 - Nutrient Management

AL Job Sheets

AL 317 - Composting Poultry Mortality

AL 317A - Composting Swine Mortality

Form AL CNMP 1

ADEM Admin. Code Ch. 335-6-7 (AFO/CAFO Program)

ADEM Admin. Code Div. 335-13 (Solid Waste Program)

1/ Seasonal high water table is defined as a zone of saturation at the highest average depth during the wettest season.

Disposal Options for Poultry Mortality Management: Under development.

Disposal Options for Slaughter Facilities Deer Only Processing Facilities

Since the new rules only restrict byproducts from cattle, no changes will be necessary for facilities that

only process deer.

Cattle Slaughter and Processing Facilities

Option 1. If you currently use a renderer for the disposal of the non-edible byproducts from your operation and your renderer certifies to you (in writing) that they do not process the byproducts into any animal feed, no changes to your operation are required.

Option 2. If you currently use a renderer for the disposal of the non-edible byproducts from your operation and your renderer has refused to accept any byproducts from your facility in the future, your options are disposal in a permitted landfill, incineration, or composting.

Option 3. If you currently use a renderer for the disposal of the non-edible byproducts from your operation and your renderer is willing to accept the non-restricted byproducts, then you must separate the restricted byproducts of the slaughtered cattle (brain and spinal cord) from the other offal. There are certification requirements on the slaughter facility and the renderer included in the new rules that must be followed. The restricted byproducts may be disposed in a permitted landfill, incinerated, or composted. If the owner of the slaughtered cow also owns a farm, the restricted byproducts may be transferred back to him for on-farm disposal.

Option 4. If you slaughter cattle that are less than 30 months of age only and the renderer agrees to accept the non-edible byproducts from your operation based on this fact. It is important to understand that all the non-edible byproducts of cattle slaughtering and processing can be taken by a renderer and used for other purposes. The new FDA rule restricts the rendering of Cattle Materials Prohibited in Animal Food or Feed (CMPAF) including brains and spinal cords of cattle older than 30 months into all animal feed.

Additional information for ADEM permitted landfills:

County	Landfill	Accept Livestock	Fee	Comments/Contact #
		Carcasses		·
Baldwin	Magnolia Sanitary Landfill	YES	YES	251-972-6878
Cherokee	Three Corners Regional Landfill	YES	YES	Call in advance 256-447-1881
Coffee	Coffee County Sanitary Landfill	YES	YES	334-897-6773
Cullman	Cullman Environmental Waste Management Center	YES	YES	256-257-0487
Dekalb	Sand Valley Landfill	YES	YES	256-524-3208
Escambia	Timberlands Sanitary Landfill	YES	YES	Must have veterinarian certification that livestock is disease free 251-867-8921
Houston	City of Dothan Sanitary Landfill	YES	YES	334-615-3820
Jackson	Scottsboro Landfill	YES	YES	256-259-5548
Lauderdale	Lauderdale County Solid Waste	YES	Residents not charged	256-760-5878
Lauderdale	Florence Municipal Solid Waste Landfill	YES	YES	Only accept livestock from within city limits 256-760-6495
Lawrence	Morris Farm Sanitary Landfill	YES	YES	256-637-9211
Lee	Salem Waste Disposal Center	YES	YES	334-663-1935
Limestone	Seven Mile Post Road MSW Landfill			Transfer station to Morris Farm Sanitary Landfill 256-233-6400
Mobile	Chastang Sanitary Landfill	YES	YES	251-829-4006
Montgomery	North Montgomery Landfill	YES	YES	334-240-4526
Morgan	Morgan County Sanitary Landfill	YES	YES	256-355-3176

Perry	Perry County Associates Landfill	YES	YES	Negotiable 770-652-2273
Pike	Brundidge Landfill LLC	YES	YES	334-735-5885
St. Clair	Veolia ES Cedar Hill Landfill, Inc.	YES	YES	205-338-7821
St. Clair	Veolia ES Star Ridge Landfill, Inc.	YES	YES	205-640-1799
Shelby	Highway 70 Landfill	YES	YES	Call in advance 205-669-3737
Tuscaloosa	Black Warrior Solid Waste Facility	YES	YES	205-339-7330
Walker	Pine View Sanitary Landfill	YES	YES	205-648-1000

Roadside Mortalities

It is the responsibility of the owners of livestock to maintain fencing and property so as to prevent access to state and county roadways. In the event livestock gain access to roadways and are killed or injured to the point of humane euthanasia, the following guidelines should be implemented.

- -State and/or local responders should attempt to find livestock owner. It is the responsibility of the owner to properly dispose of carcasses.
- -If the carcasses are on the state or county right of way, state and/or county responders should assist in the disposal. This may include burial on state/county/private property following land burial guidelines or transported to a permitted landfill. (See above chart) Other methods of disposal may be used under the direction of the State Veterinarian.